

Abstract

A system, apparatus and method for effectively deploying a safety restraint cushion is disclosed. An inflatable airbag adapted for deployment into a deployment region of a passenger vehicle is described. The inflatable airbag may have applied to or embedded within the fabric or textile of the airbag a conductive material. An electromagnetic field generating device provides an electromagnetic field within the deployment region. A sensing device is adapted for detecting the presence and relative position of said conductive material within said electromagnetic field. A control system is adapted for receiving signals indicating position, and determining if the signals are within pre-defined operational parameters. If not within such parameters the control system may send feedback signals in real time to alter the characteristics of deployment of the airbag to accommodate a perceived object or out-of-position passenger in the immediate pathway of the airbag.

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